

Governor's Drought Interagency Coordinating Committee

**Thomas Buschatzke, Assistant Director,
Water Planning Division**

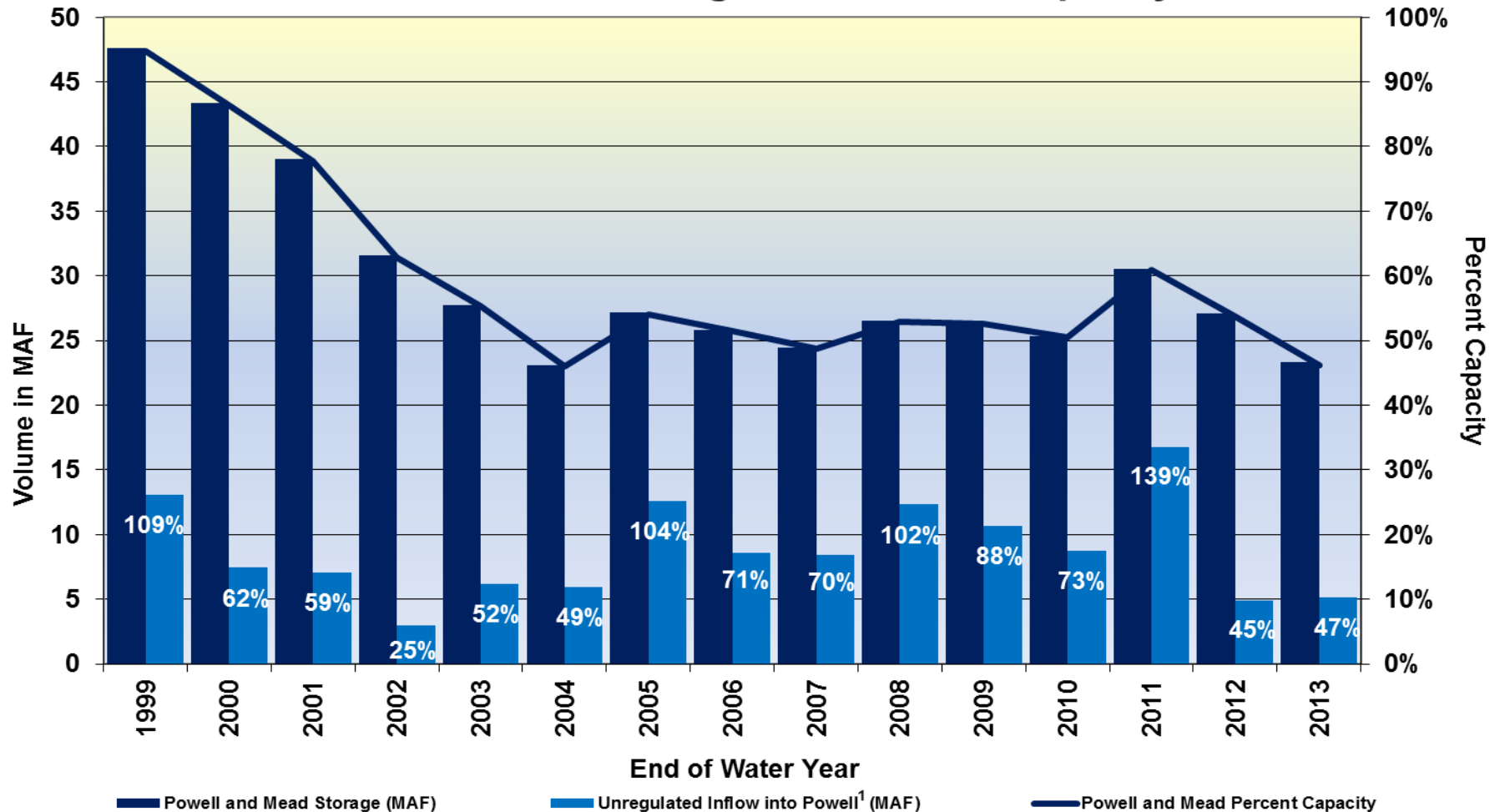
Arizona Department Of Water Resources

November 5, 2013



**PROTECTING
ARIZONA'S WATER SUPPLIES
for ITS NEXT CENTURY**

Unregulated Inflow into Lake Powell Powell-Mead Storage and Percent Capacity

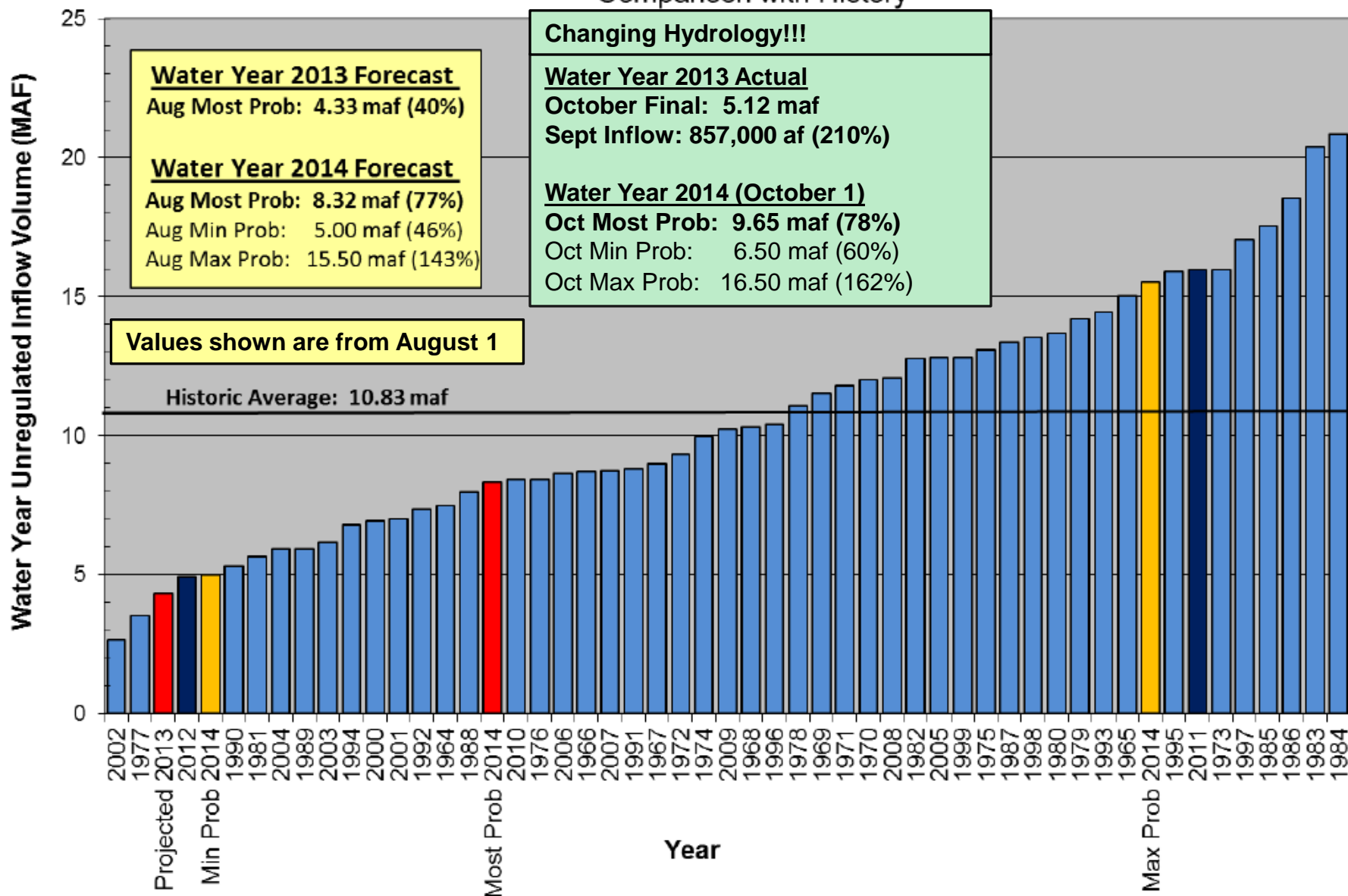


¹ Percentages at the top of the light blue bars represent percent of average unregulated inflow into Lake Powell for a given water year. Water years 1999-2011 are based on the 30-year average from 1971 to 2000. Water years 2012-2013 are based on the 30-year average from 1981-2010.

Lake Powell Unregulated Inflow

Water Years 2013 and 2014 Forecast *(issued August 1)*

Comparison with History



Lake Powell & Lake Mead Operational Table

Operational Tier Determinations for Water Year/Calendar Year 2014

Lake Powell			Lake Mead		
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) ¹	Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) ¹
3,700	Equalization Tier Equalize, avoid spills or release 8.23 maf	24.3	1,220	Flood Control Surplus or Quantified Surplus Condition Deliver > 7.5 maf	25.9
3,636 - 3,666 (2008-2026)	Upper Elevation Balancing Tier ² Release 8.23 maf; If Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	15.5 - 19.3 (2008-2026)	1,200 (approx.) ²	Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf	22.9 (approx.) ²
			1,145		16.9
3,575	3,573.69	9.5	1,105	1,103.08 Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	11.9
	1/1/14 Projection¹		1,075	1/1/14 Projection Shortage Condition Deliver 7.167 ⁴ maf	9.4
3,525	Mid-Elevation Release Tier Release 7.48 maf; If Lake Mead < 1,025 feet, release 8.23 maf	5.9	1,050	Shortage Condition Deliver 7.083 ⁵ maf	7.5
3,490	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	4.0	1,025	Shortage Condition Deliver 7.0 ⁶ maf	5.8
3,370		0	1,000	Further measures may be undertaken ⁷	4.3
			895		0

Diagram not to scale

¹ Acronym for million acre-feet

² This elevation is shown as approximate as it is determined each year by considering several factors including Lake Powell and Lake Mead storage, projected Upper Basin and Lower Basin demands, and an assumed inflow.

³ Subject to April adjustments which may result in a release according to the Equalization Tier

⁴ Of which 2.48 maf is apportioned to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

⁵ Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

⁶ Of which 2.32 maf is apportioned to Arizona, 4.4 maf to California, and 0.280 maf to Nevada

⁷ Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

¹ Lake Powell's projected elevation is based on an 8.23 maf annual release pattern from in water year 2014.

RECLAMATION

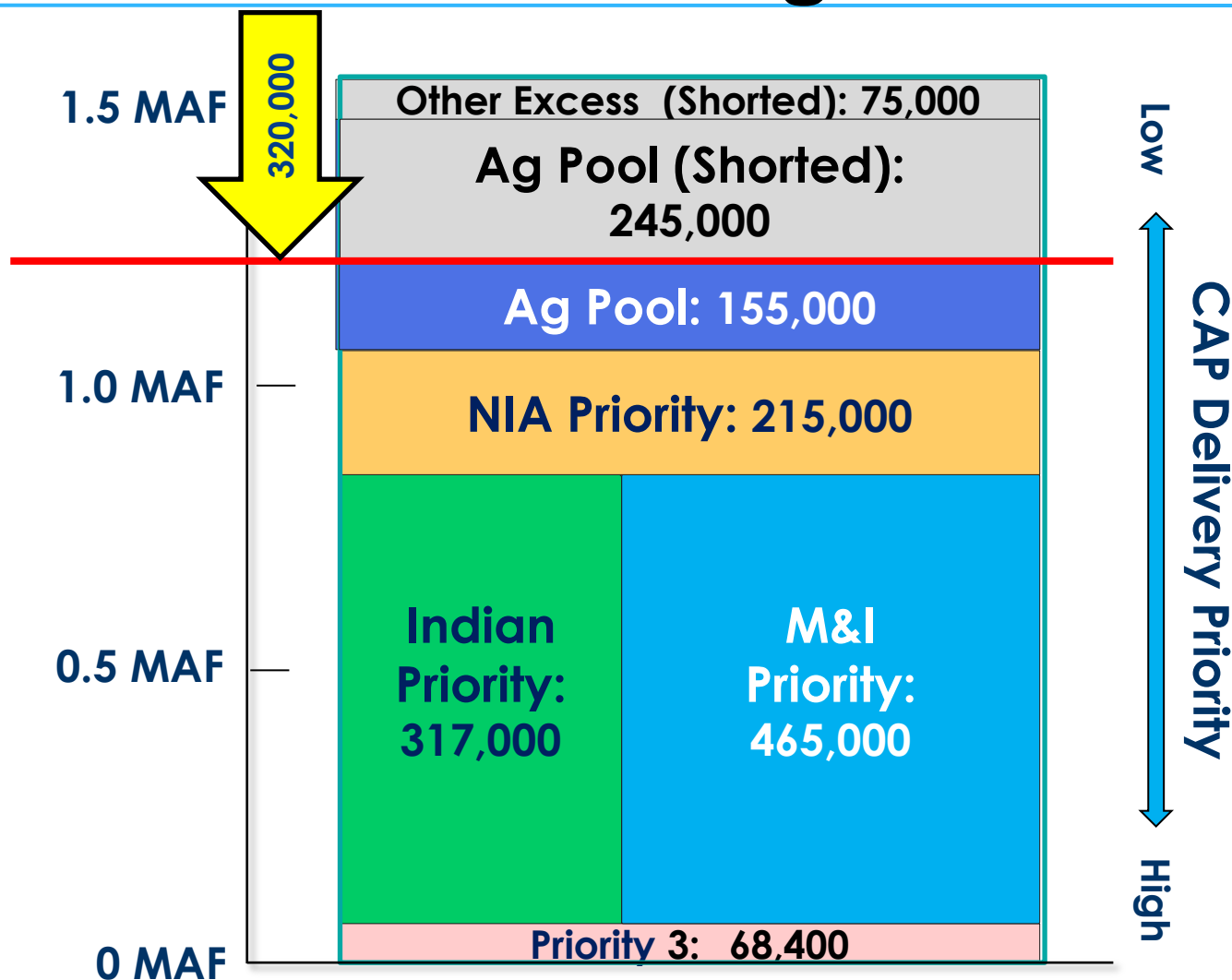
Potential For Shortages

- **33% probability of 7.48 MAF release from Lake Powell in 2015**
- **1% probability of Tier 1 shortage in the Lower Basin in 2015 (with 7.48 MAF release in water year 2014 and 2015)**
- **43% probability of Tier 1 shortage in the Lower Basin in 2016 (with 7.48 MAF release in water year 2014 and 2015)**

Based on Reclamation's October 2013 CRSS Model Run

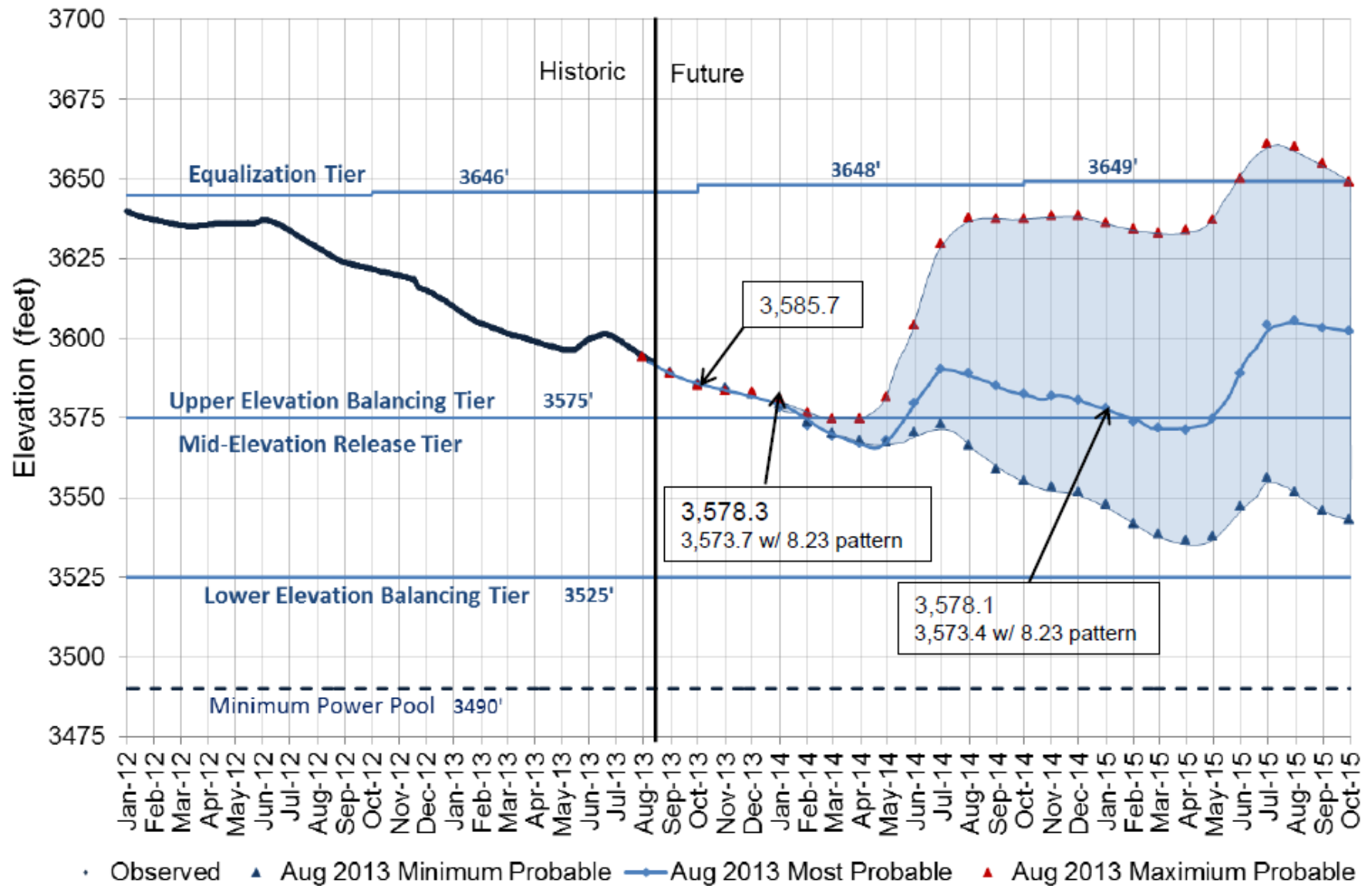


2016 Level 1 Shortage

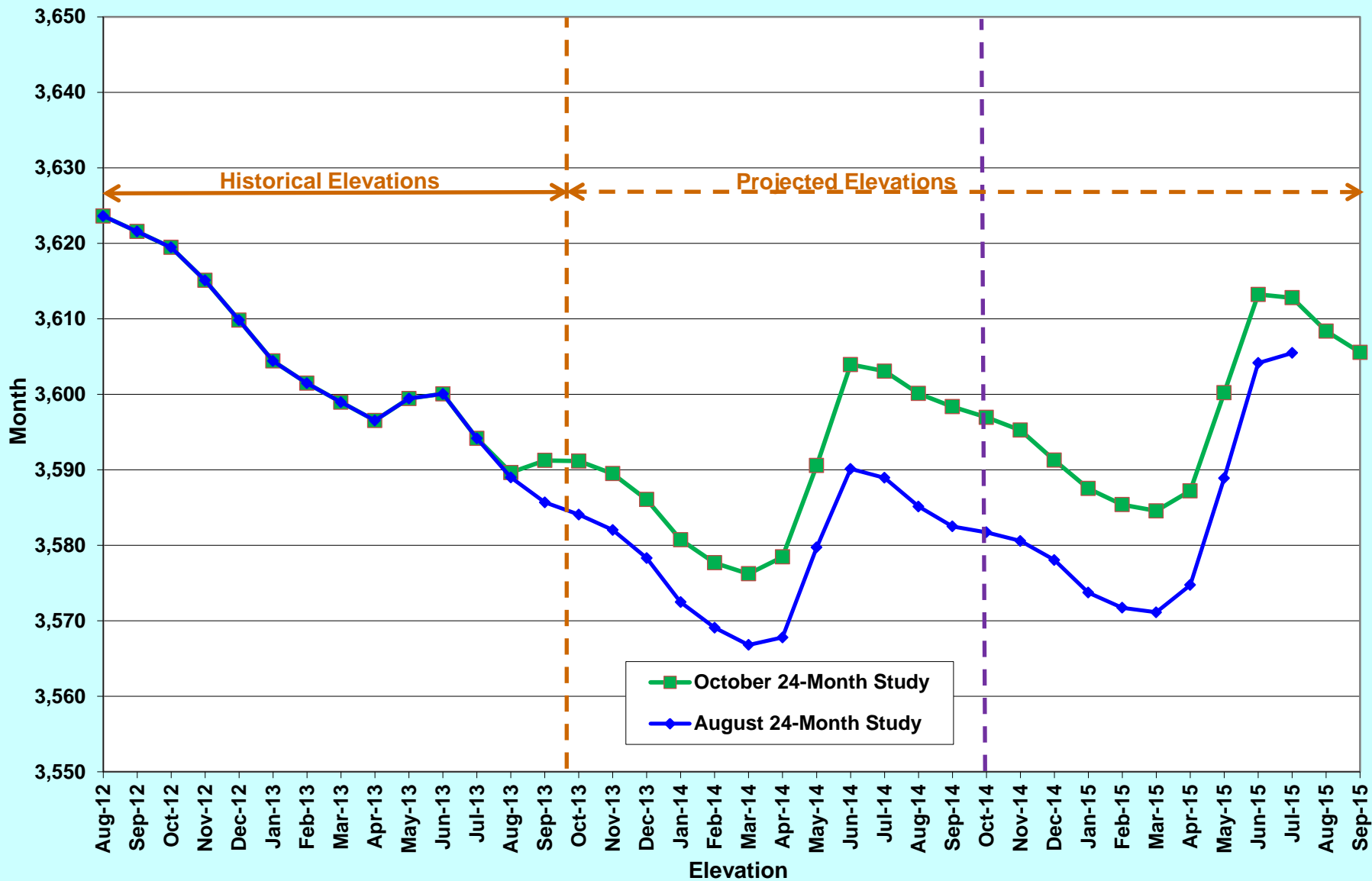


Lake Powell Elevations

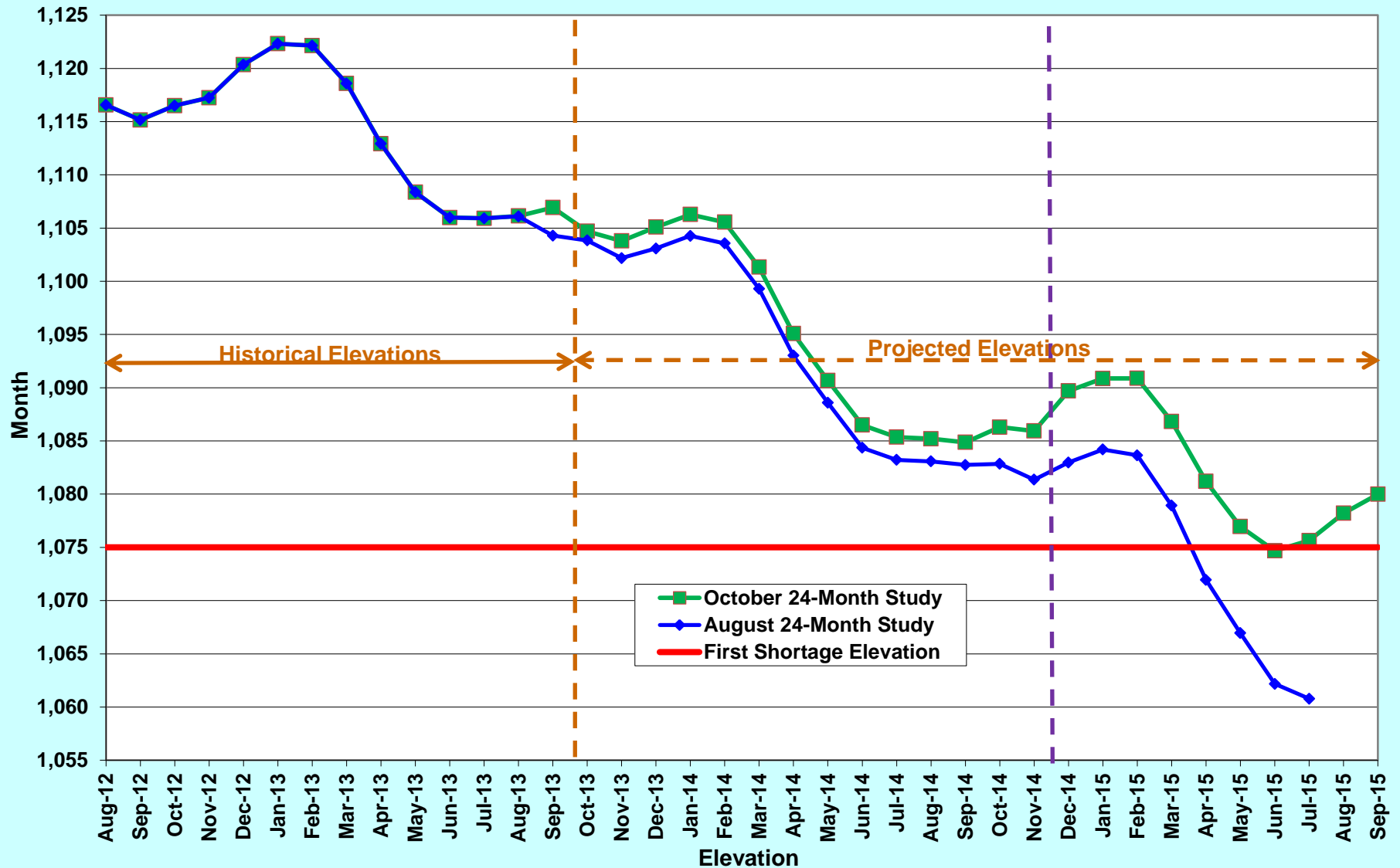
Historic and Projected based on August modeling



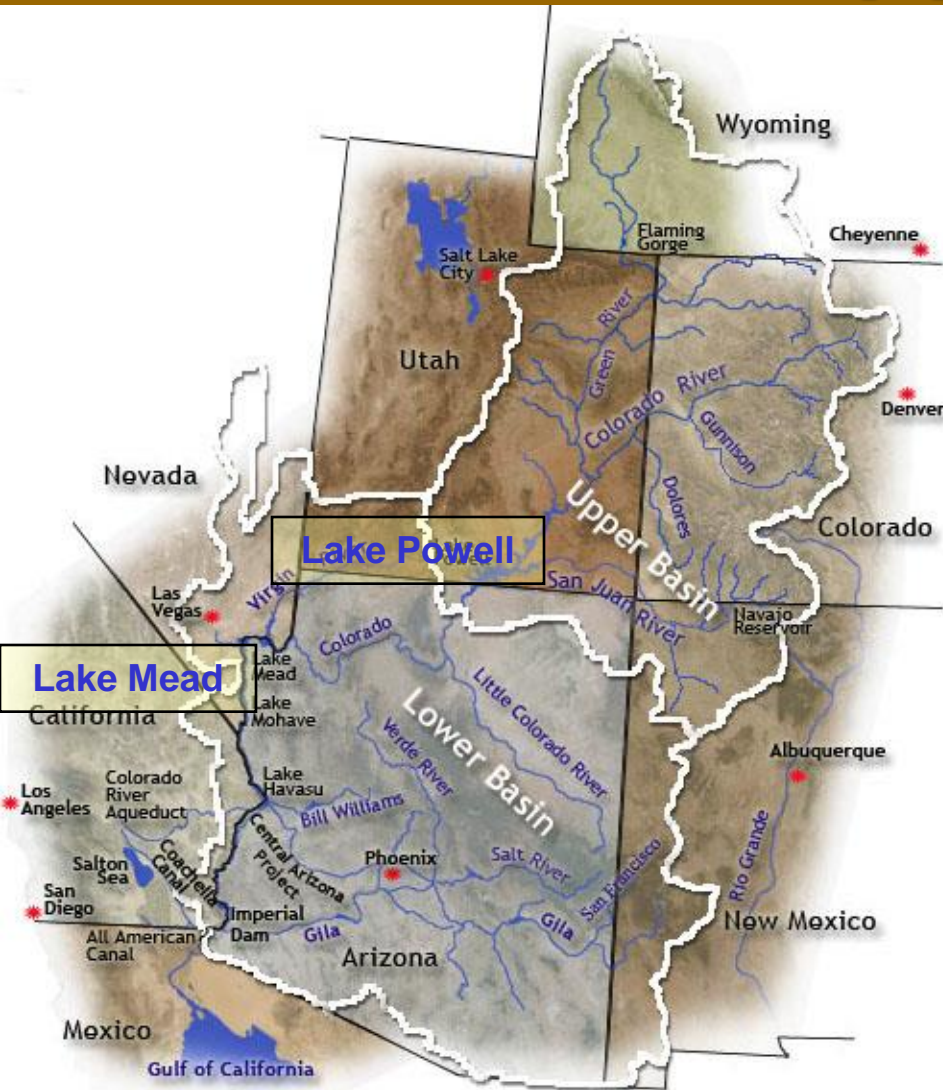
Projected Lake Powell End of Month Elevations August 24-Month Study and October 24-Month Study



Projected Lake Mead End of Month Elevations August 24-Month Study and October 24-Month Study



Colorado River Basin Water Supply Outlook



Total Reservoir System Contents:
29.6 MAF or 50%

(As of November 4, 2013)

**Total Reservoir System Contents
Last Year:**

33.6 MAF or 56%

This is a change of -4.0 MAF

Colorado River Basin Water Supply Outlook

LAKE POWELL
Capacity – 24.5 MAF
11/04/2013 - 45% full
Contents 10.91 MAF
Elevation – 3,591'

Glen Canyon
Dam

Page

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Image USDA Farm Service Agency

Image ©2010 DigitalGlobe

Imagery Dates: Jun 8, 2007 - Jun 23, 2009

37°01'38.17" N 111°22'58.22" W elev 3887 ft

Google

Eye alt 37.88 mi

Colorado River Basin Water Supply Outlook



Questions?